Type	Specification 2303 (old article #)	DS-09040
General	Contractor QC required for contracts with 5000 tons or more of HMA. (2303.01)	Contractor QC required for bid items with more than 1000 tons of HMA. (DS-2303.03, A, 3)
General	Class 1A, 1B and 1C compaction requiring 96%, 95% and 94% of lab density (G_{mb}) respectively. (2303.03,E,1)	Class 1 compaction requiring a minimum of 91.5% of maximum specific gravity (G_{mm}) for all mainline paving. (DS-2303.03,C,5, b)
General	Average percent field air voids on cores shall not exceed 8.0%. (2303.03,E,1)	No maximum **average** field voids. PWL calculated for field voids based on 3.5% minimum and 8.5% maximum field voids limit. (DS-2303.03,D,4, a, 6)
General	Test strips required for intermediate and surface courses on Interstate highways and surface courses on Primary highways. (2303.03,E,1)	Test strips required same as 2303 with additional test strips optional for the contractor. (DS-2303.03,C,5, b, 2)
General	Test strips limited to 750 tons for lift thicknesses of 2 inches or less or 1000 tons for lifts greater than 2 inches. (2303.03,E,1,d)	Test strips limited to one half of a day's normal production. (DS-2303.03,C,5, b, 2, d)
General	No contractor testing plan required.	Contractor testing plan required prior to pre-con as per IM 511, Appendix D. (DS-2303.03,D, 3, b)
Sampling	7 cores required per lot. (IM 204 Ap. F)	8 cores required per lot. More can be taken if pre-approved at the pre-con meeting. (DS-2303.03,D, 4, a, 4)
Sampling	Cold-feed aggregate samples directed and witnessed by the Engineer daily. (2303.04,B,1)	Cold-feed aggregate samples directed and witnessed by the Engineer on the first day only.
Sampling	Contractor must obtain samples within 15 minutes of being notified to sample. (2303.04,B,1)	Sampling must be initiated within 15 minutes and completed within 30 minutes of being notified to sample.

<table>
<tr><th>Type</th><th>Specification 2303</th><th>DS-01118</th></tr>
<tr><td>Sampling</td><td>Loose HMA samples for lots of 2000 tons or greater will be obtained from sublots. The first sublot will be 500 tons with three additional sublots determined by dividing the remainder by three. (2303.04,B,1)</td><td>Equal sublots determined by dividing the estimated tonnage by the number of sublots in following table:
<table>
<tr><th>Estimated Tons (Mg)</th><th>No. of Sublots</th></tr>
<tr><td>101-500</td><td>1</td></tr>
<tr><td>501-1250</td><td>2</td></tr>
<tr><td>1251-2000</td><td>3</td></tr>
<tr><td>2001-4500</td><td>4</td></tr>
<tr><td>Over 4500</td><td>5</td></tr>
</table></td></tr>
<tr><td>Sampling</td><td>For lots less than 2000 tons, the first sublot will be 500 tons and the remaining sublots will be 750 tons each. (2303.04,B,1)</td><td>Equal sublots. Same as above table.</td></tr>
<tr><td>Sampling</td><td>Maximum of 4 sublots per lot. (2303.04,B,1)</td><td>May have 5 sublots if tonnage exceeds 4500 tons per day.</td></tr>
<tr><td>Testing</td><td>Lab voids (P_a) shall be maintained within a tolerance of -0.5 to +1.0 from the target value. (2303.04,B,2)</td><td>Tolerances for lab voids (P_a) are ±1.0% from the target value.</td></tr>
<tr><td>Testing</td><td>Moving average of four tests used for lab voids acceptance. Shut-down required if moving average is outside the tolerances. (2303.04,B,2)</td><td>Weekly lots of lab voids used to calculate PWL if 8 tests or more are run. Weeks may be grouped to obtain 8 tests. Max of 20 tests in a lot. AAD calculated for bid items with less than 8 lab voids tests. No shut-down required.</td></tr>
<tr><td>Testing</td><td>Validation of contractor’s cold-feed gradation by the District Lab is performed on split samples. (2303.04,D,1)</td><td>Validation of contractor’s cold-feed gradation by the District Lab is performed by comparing the contractor’s results to an ignition oven gradation.</td></tr>
<tr><td>Testing</td><td>No gradation correction factors required.</td><td>Correction factors determined on first day of production by comparing DOT gradation test results on a cold-feed sample to DOT gradation results on an ignition oven sample.</td></tr>
</table>

Type	Specification 2303	DS-01118
Payment	If lot average gradation is outside tolerances, price adjustment schedule is applied. (2303.04,B,2)	No price adjustment for gradation. Target change or JMF adjustment required if gradation is outside tolerances.
Payment	If filler/bitumen ratio is outside the tolerances, price adjustment schedule is applied. (2303.04,B,2)	No price adjustment for filler/bitumen ratio. If filler/bitumen ratio is outside the tolerances contractor must adjust to start production the next day.
Payment	If QI for field density cores is less than 0, 75% maximum pay or the Engineer may declare the lot defective. (2303.06,A)	If PWL for field voids is less than 50%, 75% maximum pay or the Engineer may declare the lot or parts of the lot deficient or unacceptable.
Payment	Outliers for cores removed if 1.80 standard deviations or greater from the mean. (2303.04,C,1)	Outliers for cores removed if QI is greater than 1.8.
Payment	No incentive paid for field density. Price adjustments based on 4 step QI pay schedule. (2303.06,A)	Incentive paid for field voids PWL greater than 95% up to a maximum of 4%. Price adjustments based on equations.
Payment	No price adjustments or incentive paid for lab voids.	Incentive paid for lab voids PWL greater than 95% up to a maximum of 3%. Price adjustments based on equations. If fewer than 8 lab voids results available for a bid item, price adjustments based on AAD schedule with no incentive pay.
Payment	If the percent of asphalt binder in the mix is outside the tolerances, price adjustment schedule is applied. (2303.04,B,2)	No price adjustment for binder content. Contractor may adjust binder content as needed to achieve a uniform mix.
Payment	Test strips paid for same as rest of mix. (2303.06,A)	Special pay schedule for test strips.